

June 22, 1937

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON



PRELIMINARY LIST OF THE BUTTERFLIES
OF VIRGINIA.

BY AUSTIN H. CLARK AND LEILA F. CLARK.

The butterflies of Virginia have attracted attention ever since 1587 when John White brought back to England a colored drawing of a female of the common yellow swallowtail (*Papilio glaucus*), which was published as a wood-cut in 1634. In colonial times and immediately afterwards many specimens were sent to Europe and a number of species were described and recorded from Virginia, especially in the works of Drury (1770-1782), Cramer (1779-1782), Godart (1819), and Boisduval and LeConte (1829-1837). Since the time of Boisduval and LeConte the published information on Virginian butterflies has been almost wholly in the form of incidental records, mainly by Strecker (1878), William H. Edwards (1868-1887), and Scudder (1889), and brief notes by various authors.

In the following list there are included the 133 species and subspecies that we believe have actually been taken in Virginia. We ourselves have taken 126 of these, and we have indubitable records of all the others except *Phyciodes gorgone*, *Hemiargus hanno*, *Terias jucunda*, and *Terias delia*. These four have not been found in the State within the past one hundred years, but we have no reason to believe that the early records of their occurrence are not correct.

In listing the species and subspecies we have used subspecific names when more than one subspecies occurs in the State, or when the subspecies found in the State is not the typical form, as in the case of *Polygonia faunus*, *Nymphalis antiopa*, *Basilarchia arthemis*, *Dione vanillae*, etc. In other cases the use of subspecific designations seemed superfluous.

The distribution, actual or probable, of each species and subspecies within the State is roughly indicated by a reference to the life zone or

zones in which it has been found at the height of its seasonal abundance, as follows:

C.	=Canadian
T.	=Transition
U.A.	=Upper Austral
L.A.	=Lower Austral

It must be remembered that the information regarding the local distribution of the endemic or visiting species is as yet very meager. No less than 16 are known from only a single record, or from a single locality, while many others are known from only a very few widely scattered localities. At least six species and possibly more are summer visitors only, arriving each summer from the south and dying out completely during the winter.

In the use of generic names we have followed "The Generic Names of the Holarctic Butterflies," vol. 1, 1758-1863, by Francis Hemming, published by the British Museum in 1934.

This is the British official list of names. We can see no reason why the painstaking and excellent work of Captain Hemming should not be accepted here as well as abroad. General acceptance of these names would go a long way toward stabilizing the nomenclature of our native, as well as of European, butterflies.

LIST OF BUTTERFLIES DEFINITELY KNOWN FROM VIRGINIA.

Family NYMPHALIDAE; subfamily Satyrinae.—*Neonympha gemma* (Hübner) [L.A.]. *Neonympha areolatus septentrionalis* (Davis) [L.A.]. *Neonympha eurytus* (Fabricius) [throughout]. *Neonympha sosybius* (Fabricius) [L.A.]. *Cercyonis alope alope* (Fabricius) [L.A.; U.A.]. *Cercyonis alope pegala* (Fabricius) [L.A.]. *Cercyonis alope maritima* (W. H. Edwards) [T.]. *Satyrodes eurydice* (Linné) [T.; L.A.]. *Enodia portlandia portlandia* (Fabricius) [L.A.]. *Enodia portlandia anthedon* A. H. Clark [T.]. *Enodia creola* (Skinner) [L.A.].

Subfamily Nymphalinae.—*Polygona interrogationis* (Fabricius) [throughout]. *Polygona comma* (Harris) [throughout]. *Polygona progne* (Cramer) [T.]. *Polygona faunus smythi* A. H. Clark [C.]. *Nymphalis antiopa creta* (Verity) [throughout]. *Vanessa atalanta* (Linné) [throughout]. *Vanessa virginensis* (Drury) [throughout]. *Vanessa cardui* (Linné) [throughout]. *Precis coenia* Hübner [throughout]. *Asterocampa celtis* (Boisduval and LeConte) [L.A.; U.A.]. *Asterocampa clyton* (Boisduval and LeConte) [L.A.; U.A.]. *Basilarchia artemis astyanax* (Fabricius) [throughout]. *Basilarchia artemis albofasciata* Newcomb [C.]. *Basilarchia archippus* (Cramer) [throughout]. *Euphydryas phaeton* (Drury) [T.]. *Phyciodes nycteis* (Doubleday and Hewitson) [U.A.; T.]. *Phyciodes tharos* (Drury) [throughout]. *Phyciodes batesii* (Reakirt) [T.]. *Phyciodes gorgone* (Hübner) [L.A.]. *Argynnис bellona* (Fabricius) [T.]. *Argynnис myrina* (Cramer) [T.; L.A.]. *Argynnис idalia* (Drury) [U.A.]. *Argynnис diana* (Cramer) [T.; L.A.]. *Argynnис cybele* (Fabricius) [throughout]. *Argynnис aphrodite* (Fabricius) [T.; C.]. *Euptoieta claudia* (Cramer) [L.A.; U.A.; T.]. *Dione vanillae incarnata* Riley [L.A.].

Subfamily Danaiinae.—*Danaus plexippus* (Linné) [throughout].

Subfamily Libytheinæ.—*Libythea bachmani* Kirtland [L.A.; U.A.].

Family RIODINIDÆ.—*Nymphidia pumila* Boisduval and LeConte (= *Calephelis* or *Charis virginiensis* auct.) [L.A.]. *Nymphidia borealis* (Grote and Robinson) [T.].

Family LYCAENIDÆ; subfamily Gerydinæ.—*Feniseca tarquinius* (Fabricius) [throughout].

Subfamily Lycaeninæ.—*Lycaena phlaeas hypophlaeas* (Boisduval) [throughout].

Subfamily Plebeiinae.—*Lycaeopsis argiolus pseudargiolus* (Boisduval and LeConte) [throughout]. *Glaucopsyche lygdamus* (Doubleday) [T.]. *Everes comyntas* (Godart) [throughout]. *Hemiarthus hanno* (Stoll) [L.A.].

Subfamily Theclinæ.—*Atlides halesus* (Cramer) [L.A.]. *Strymon titus mopsus* (Hübner) [U.A.]. *Strymon m-album* (Boisduval and LeConte) [U.A.]. *Strymon edwardsii* (Saunders) [T.]. *Strymon liparops* (Boisduval and LeConte) [T.]. *Strymon falacer* (Godart) [T.; U.A.]. *Strymon ontario* (W. H. Edwards) [U.A.]. *Strymon cecrops* (Fabricius) [L.A.; U.A.; T.]. *Strymon melinus* (Hübner) [throughout]. *Mitoura gryneus* (Hübner) [L.A.; U.A.]. *Incisalia augustinus* (Westwood) [T.]. *Incisalia irus* (Godart) [T.]. *Incisalia henrici* (Grote and Robinson) [U.A.]. *Incisalia niphon* (Hübner) [throughout].

Family PAPILIONIDÆ; subfamily Pierinæ.—*Ascia monuste* (Linné) [L.A.]. *Pieris rapae* (Linné) [throughout]. *Pieris protodice* Boisduval and LeConte [U.A.; L.A.]. *Euchloë genutia* (Fabricius) [throughout]. *Phoebe cubule* (Linné) [throughout]. *Zerene caesonnia* (Stoll) [L.A.]. *Colias philodice philodice* Godart [throughout]. *Colias philodice eurytheme* Boisduval [throughout]. *Terias nicippe* (Cramer) [U.A.; L.A.]. *Terias jucunda* (Boisduval and LeConte) [L.A.]. *Terias lisa* (Boisduval and LeConte) [throughout]. *Terias delia* (Cramer) [L.A.].

Subfamily Papilioninæ.—*Papilio philenor* Linné [throughout; var. *acauda* in spring, U.A.]. *Papilio polyxenes asterius* Cramer [throughout]. *Papilio cresphontes* Cramer [L.A.; U.A.]. *Papilio glaucus* Linné [throughout]. *Papilio troilus* Linné [throughout]. *Papilio palamedes* Drury [L.A.]. *Papilio marcellus* Cramer [throughout].

Family HESPERIIDÆ; subfamily Pyrginæ.—*Epargyreus clarus* (Cramer) (= *tityrus* auct.) [throughout]. *Urbanus proteus* (Linné) [L.A.]. *Achalarus lyciades* (Geyer) [throughout]. *Rhabdoïdes cellus* (Boisduval and LeConte) [T.]. *Thorybes bathyllus* (Smith) [throughout]. *Thorybes pylades* (Scudder) [throughout]. *Thorybes confusis* Bell [L.A.; U.A.]. *Pyrgus centaureae wyandot* (W. H. Edwards) [T.]. *Pyrgus communis* (Grote) [throughout]. *Pholisora catullus* (Fabricius) [throughout]. *Pholisora hayhurstii* (W. H. Edwards) [L.A.]. *Erynnis icelus* (Scudder and Burgess) [T.; U.A.]. *Erynnis brizo* (Boisduval and LeConte) [T.; U.A.]. *Erynnis perseus* (Scudder) [T.; U.A.]. *Erynnis lucilius* (Scudder and Burgess) [T.]. *Erynnis martialis* (Scudder) [throughout]. *Erynnis juvenalis* (Fabricius) [throughout]. *Erynnis horatius* (Scudder and Burgess) [throughout]. *Erynnis terentius* (Scudder and Burgess) [L.A.; U.A.].

Subfamily Hesperiinae.—*Ancyloxypha numitor* (Fabricius) [throughout].

Hesperia metea Scudder [U.A.]. *Hesperia leonardus* Harris [T.]. *Hesperia sassacus* Harris [T.]. *Hylephila phylaeus* (Drury) [L.A.; U.A.]. *Atalopedes campestris* (Boisduval) [throughout]. *Polites verna* (W. H. Edwards) [throughout]. *Polites manataqua* (Harris) [throughout]. *Polites themistocles* (Latreille) (=cerne auct.) [throughout]. *Polites peckius* (Kirby) [throughout]. *Polites brettus* (Boisduval and LeConte) [L.A.]. *Wallengrenia oto egeremet* (Scudder) [throughout]. *Poanes viator* (W. H. Edwards) [L.A.]. *Poanes hobomok* (Harris) [T.]. *Poanes zabulon* (Boisduval and LeConte) [throughout]. *Poanes aaroni* (Skinner) [salt marshes]. *Poanes yehl* (Skinner) [L.A.]. *Atrytone aragos* (Boisduval and LeConte) [L.A.; T.]. *Atrytone logan* [L.A.; T.]. *Atrytone dion dion* (W. H. Edwards) [Princess Anne and Norfolk Cos.]. *Atrytone dion alabamae* Lindsey [Accomac Co.]. *Atrytone ruricola* (Boisduval) (=vestris auct.) [throughout]. *Atrytonopsis hianna* (Scudder) [T.; U.A.]. *Lerema accius* (Smith) [L.A.; U.A.]. *Amblyscirtes vialis* (W. H. Edwards) [T.]. *Amblyscirtes hegona* (Scudder) [T.]. *Amblyscirtes textor* (Hübner) [L.A.]. *Amblyscirtes carolina* (Skinner) (and var. *reversa* Jones) [L.A.]. *Lerodea l'herminier* (Latreille) (=fusca auct.) [L.A.; U.A.]. *Lerodea eupala* (W. H. Edwards) [L.A.]. *Calpodes ethlius* (Cramer) [L.A.]. *Panoquina panoquin* (Scudder) [salt marshes]. *Panoquina ocola* (W. H. Edwards) [L.A.; U.A.].

ERRONEOUS RECORDS.

The following species have been erroneously credited to Virginia: *Basilarchia arthemis arthemis* (Drury) [a northern form given by Emmons from Virginia.]. *Lycorella cleobaea* (Godart) [Virgin Islands; given by error as Virginia.]. *Ithomia drymo* (Hübner) [includes *diaphana* Cramer from Virginia, Minas Geraes, Brazil]. *Terias elathea* (Cramer) [Gulf region and tropical America; may possibly occur in Virginia]. *Colias alexandra* W. H. Edwards [includes *C. edwardsii* W. H. Edwards described from Virginia City, Nevada, later given as Virginia]. *Zegrus olympia* (W. H. Edwards) [occurs in West Virginia, sometimes given as Virginia]. *Erynnis martialis* ab. *ausonius* (Lintner) [listed by Strecker from Virginia]. *Potanthus mingo* (W. H. Edwards) [a Philippine species originally described by error from West Virginia, given by Evans as Virginia]. *Augiaades sylvanus* (Esper) [a species from Europe, north Africa, and Asia Minor given from Richmond, Virginia, by Holland].

SPECIES TO BE SOUGHT FOR IN VIRGINIA.

Species recorded from both north and south of Virginia, but not as yet reported from within the State: *Plebeius scudderi* (W. H. Edwards) [T.; C.]. *Strymon favonius* (Smith) [L.A.]. *Phoebe philea* (Linné) [L.A.]. *Tachyris iliaire* (Godart) [L.A.]. *Pieris virgininiensis* W. H. Edwards [T.]. *Hesperia attalus* (W. H. Edwards) [L.A.; U.A.].

Species recorded from near the borders of Virginia, but not known from within the State: *Nymphalis l-album* *j-album* (Boisduval and LeConte) [Md.; W.Va.]. *Nymphalis milberti* (Godart) [W. Va.]. *Melitaea harrisii* Scudder [W. Va.]. *Argynnis atlantis* W. H. Edwards [W. Va.]. *Lycaena*

thoë (Boisduval) [D.C.]. *Erora laeta* (W. H. Edwards) [W. Va.]. *Zegris olympia* (W. H. Edwards) [W. Va.]. *Hesperia meskei* (W. H. Edwards) [N. C.]. *Polites mystic* (Scudder) [N. J.]. *Poanes massasoit hughii* A. H. Clark [Beltsville and Hyattsville, Md.]. *Atrytone conspicua* (W. H. Edwards) [D. C.]. *Atrytone bimacula* (Grote and Robinson) [Cabin John, Md.]. *Atrytonopsis loammi* (Whitney) [N. C.]. *Amblyscirtes alternata* (Grote and Robinson) [N. C.].